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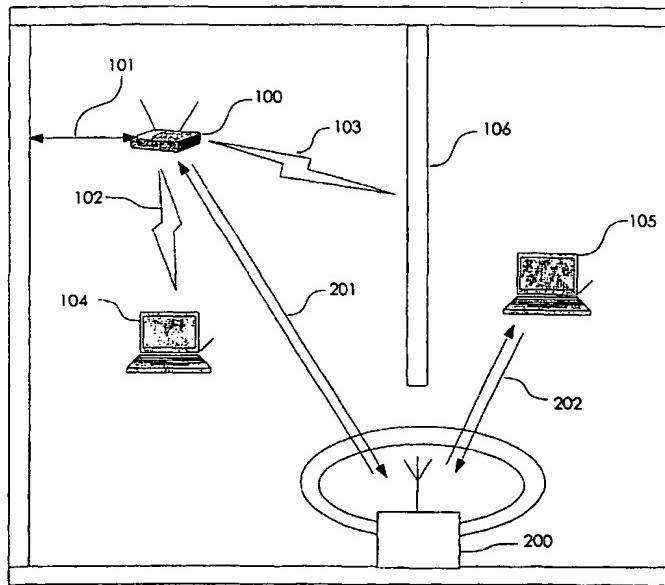
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(54) Title: WIRELESS LOCAL AREA NETWORK REPEATER WITH DETECTION



(57) Abstract: A frequency translating repeater (200) for use in a time division duplex radio protocol communications system includes an automatic gain control feature. Detection is performed by comparators (401, 411) ADCs (402, 412), DACs (404, 414) and a processor (315). Detection can be overridden by processor (315) using logic elements (406, 416, 407, and 417) to control the generation of a Channel A/Channel B signal and a PA\_ON signal for controlling a power amplifier associated with the transmitter.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/35050

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04J 15/00  
 US CL : 370/464

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 370/464, 310, 252, 302, 315, 315, 332, 341, 343, 464

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,214,788 A (DELAPERRIERE et al) 25 May 1993, Figure 2.	1-47
A	US 4,509,206 A (CARPE et al) 02 April 1985, Abstract.	1-47
A	US 4,723,302 A (FULMER et al) 02 February 1988, Abstract.	1-47

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"Z"	document member of the same patent family
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Name and mailing address of the ISA/US  Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer   Wellington Chin Telephone No. (703)308-1782